

WHAT IS CLAIMED IS:

1. An image reading apparatus comprising:

an exposure lamp;

a photoelectric conversion device which converts

5 an image at a region illuminated by the exposure lamp
into an image signal;

a variable amplifier which amplifies the image
signal output from the photoelectric conversion device
at an instructed amplification factor; and

10 a detecting unit which compares a level of the
image signal obtained from the variable amplifier with
a reference value and detects deterioration of the
exposure lamp when a reference white surface is
illuminated by the exposure lamp, with the
15 amplification factor of the variable amplifier being
set to a predetermined value.

2. An image reading apparatus according to
claim 1, wherein the reference value is a value of data
obtained from the variable amplifier when the reference
20 white surface is illuminated by the exposure lamp which
has reached a lifetime thereof with the amplification
factor of the variable amplifier being set to the
predetermined value.

3. An image reading apparatus according to
25 claim 2, further comprising a termination unit which
terminates operation the apparatus when the
deterioration is detected.

4. An image reading apparatus according to claim 1, further comprising a display unit which displays a message to urge replacement of the exposure lamp when the deterioration is detected.

5 5. An image reading apparatus comprising:

an exposure lamp;

a photoelectric conversion device which converts an image at a region illuminated by the exposure lamp into an image signal;

10 a variable amplifier which amplifies the image signal output from the photoelectric conversion device at an instructed amplification factor;

an amplification factor adjusting unit which adjusts the amplification factor of the variable
15 amplifier such that a level of the image signal obtained from the variable amplifier is a predetermined level when a reference white surface is illuminated by the exposure lamp; and

a detecting unit which compares the amplification
20 factor of the variable amplifier adjusted by the amplification factor adjusting unit with a reference amplification value, and which detects deterioration of the exposure lamp.

25 6. An image reading apparatus according to claim 5, wherein the reference amplification value is an amplification factor of the variable amplifier in which the level of the image signal obtained from the

variable amplifier is the predetermined level when the reference white surface is illuminated by an exposure lamp which is the same type as the exposure lamp and which has reached a lifetime thereof.

5 7. An image reading apparatus according to claim 6, further comprising a termination unit which terminates operation of the apparatus when the deterioration is detected.

10 8. An image reading apparatus according to claim 5, further comprising a display unit which displays a message to urge replacement of the exposure lamp when the deterioration is detected.

9. A method for detecting deterioration of an exposure lamp, comprising:

15 illuminating a reference white surface by an exposure lamp;

 converting an image at a region illuminated by the exposure lamp into an image signal by a photoelectric conversion device;

20 amplifying the image signal output from the photoelectric conversion device at a predetermined amplification factor; and

 comparing a level of the amplified image signal with a reference value, and detecting deterioration of the exposure lamp.

25 10. A method for detecting deterioration of an exposure lamp, according to claim 9, wherein

the reference value is a value of data obtained by
setting the amplification factor of the variable
amplifier to the predetermined value when the reference
white surface is illuminated by an exposure lamp which
5 is the same type as the exposure lamp and which has
reached a lifetime thereof.